REMARKS/ARGUMENTS

Favorable reconsideration of this application as currently amended and in light of the following discussion is respectfully requested.

Claims 1 and 3-24 are pending, Claims 22-24 are amended by way of the present amendment.

In the outstanding Office Action, Claims 22-24 were objected to; Claim 1 was rejected as being anticipated by Kinoshita et al (U.S. 2002/0027703, hereinafter Kinoshita); and Claims 3-24 were indicated as containing allowable subject matter.

Applicants appreciatively acknowledge the telephone discussion with the undersigned on January 19, 2006. During the telephone conversation, the substance of the remarks that follow were discussed, and the Examiner indicated that he would reconsider the rejection of Claim 1.

Objections to Claims 22-24 have been addressed by way of the present amendment.

Applicants respectfully traverse the rejection of Claim 1. Claim 1 requires an optical fiber characterized by having a full width at half maximum of a gain spectrum to be 45 nm or more, and maximum value of power conversion efficiency as being 80% or more.

As discussed on the telephone, the feature of Claim 1 is directed to a "gain spectrum" and thus corresponds with the portion of the spectrum at which gain is applied to the optical data signal. Kinoshita properly refers to this spectrum as being the "gain bandwidth" or "amplification bandwidth" (see, e.g. [0093] and [0094]). Furthermore, Kinoshita clearly shows in Fig. 7, that the signals to be amplified (which would correspond to the "gain spectrum") correspond, for example, to channels 1-32, within the 1550 nm signal spectrum. The Office Action, on the other hand, refers to Fig. 24 in order to reject Claim 1. However, Fig. 24 corresponds to the spectrum in which pump light is applied to excite the amplification

fiber in order to create a corresponding gain in the signal spectrum (see, e.g. signals at 1550nm band (not shown in Fig. 24)). Moreover, the bands shown in Fig. 24 are not gain spectrums, but rather the excitation bands (or absorption bands), at which pump light is provided to cause a corresponding amplification of optical signals in a different band (e.g. 1550 nm band, for example).

Although the Office Action refers to paragraph [0190] as providing support for the notion that Fig. 24 actually describes an amplification band, it is respectfully submitted that this is incorrect. The Office Action apparently has incorrectly construed the last sentence in paragraph [0190] as indicating that the band shown in Fig. 24 is the amplification (or gain) band, but this is not the case. The language in the last sentence of [0190], merely states that an amplification operation of an optical signal can be obtained in one EDF working band. In fact, an amplification operation can happen if pump lights are applied as shown in Fig. 24, although the amplification will occur in a different band. One of ordinary skill in the art would construe this to mean, that the absorption or excitation bands shown in Fig. 24 would amplify signals in a band which even Kinoshita recognizes as being the gain bandwidth or amplification bandwidth (see, e.g. paragraph [0093]). Furthermore, it is not reasonable to consider the excitation band shown in Fig. 24 to be the gain spectrum because the pump wavelengths would interfere (or "jam") the data signals.

Consequently, it is respectfully submitted that Kinoshita does not disclose a "gain spectrum" of 45 nm or more. Therefore it is respectfully submitted that Kinoshita does not anticipate Claim 1.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention as presently claimed patentably defines over the asserted prior art. The present application is therefore believed to be in

condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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